

Environmental Health Program and Budget in Local Health Departments, 1954

DATA on the administration of environmental health services in local health departments were obtained during 1954 by means of questionnaires sent to all members of the Conference of Municipal Public Health Engineers. Of the 39 replies received from members associated with local programs, 35 provided information with sufficient detail and completeness to be used in the study.

In a similar study in 1951, data were obtained from 41 local health departments. Many of these data are used here for comparison. However, because not all the departments that reported in 1951 were included in the 1954 study, comparisons between the two studies are not entirely valid. As shown in table 1, only 21 of the 41 departments that reported in 1951 also reported in 1954. There is more overlap among the departments serving populations of 200,000 or more than there is among the smaller departments.

Generally speaking, the proportion of large health departments in both the 1951 and the 1954 samples is greater than the proportion in the total number of local health departments. For example, in 1951 local health departments serving populations of 500,000 or more represented 2.2 percent of all full-time local health departments (1). In the 1951 study, they represented 24 percent of the sample, and in the 1954 study, 47 percent.

Program Coverage

To obtain a picture of the program coverage provided by the 35 local health departments, analyses were made on the basis of 16 major

classifications, as shown in table 2. A health department was credited with an activity only if a comprehensive program was indicated. For example, animal disease control had to include more than just animal bite investigation.

Most of the departments (more than 80 percent) maintained routine inspection activities with respect to water, sewage, bathing places, food, and milk. More than half of the departments reported inspection activities in refuse disposal, meat, pest and vector control, institutions, and schools; and more than a quarter reported programs in housing, barber and beauty shops, air pollution, and industrial health. There seems to have been a significant increase in the number of departments reporting routine housing and air pollution control activities in 1954 as compared with 1951.

Some of the more recently recognized environmental health activities were being conducted by the following percentages of health departments: noise control, 24 percent; noxious weed control, 15 percent; home accident prevention, 27 percent; radiation protection, 35 percent.

In most of the program areas, fewer departments provided consultation services than routine inspection services. Exceptions to this were programs in plumbing, pest and vector control, animal disease control, air pollution control, and industrial health.

Of particular interest was the information reported on the degree of specialization in the administration of routine environmental health activities. In recent years there has been a trend in some departments toward a general-

ized sanitation program, that is, a program carried out by generalized, rather than specialized, personnel. However, both specialized programs and generalized programs have advantages and disadvantages. Which of the two is the more economical in terms of both cost and effectiveness remains to be determined.

All activities can be carried out by specialized personnel, but the data in table 3 indicate that certain activities are more often carried out by specialized personnel than others. Activities in the following areas were reported specialized by more than half the departments: plumbing, milk, pest and vector control, animal disease control, and industrial health.

Table 1. Comparison of the 1951 and 1954 groups of local health departments included in the studies

Population served	Number of departments reporting		Departments reporting in both 1951 and 1954	
	1951	1954	Number	Percent of 1954
Less than 100,000.....	3	3	1	33
100,000-199,999.....	13	8	3	27
200,000-499,999.....	15	10	6	60
500,000 or more.....	10	14	¹ 11	79
Total.....	41	35	21	60

¹ Dallas, Tex., St. Louis County, Mo., and Jefferson County, Ala., were reported in the 200,000-499,999 group in 1951 and in the 500,000 or more group in 1954.

Although there are certain activities that are more amenable to generalization than others, the data in table 4 suggest that there may also be budgetary reasons for generalization. When grouped according to the percentage of activities specialized, the health departments varied little in the average number of activities performed. However, the average per capita budget and the average per capita expenditure per activity were nearly twice as much for the departments having the highest degree of specialization as for those with the least degree of specialization.

It would be presumptuous to conclude from these few data that an activity performed under

Background of Report

This paper is based on an excerpt from a report of the Executive Committee of the Conference of Municipal Public Health Engineers. In addition to the material presented here, the report includes information on such items as salaries for directors of sanitation, sanitary engineers, sanitarians, and sanitary inspectors; policies on pay increases, holidays, overtime, vacations, sick leave, pensions, and reimbursement for transportation; professional background, educational level, and age distribution of professional sanitation personnel; and the number of clerical personnel in sanitation departments.

The study was initiated in 1954 by P. W. Purdom, director of the division of air pollution control and environmental sanitation, Philadelphia Department of Public Health, when he was chairman of the Conference of Municipal Public Health Engineers. The data were analyzed and compiled in report form by Walter A. Lyon, assistant chief of the environmental health section, Philadelphia Department of Public Health, and a member of the Conference of Municipal Public Health Engineers.

a generalized program costs less than the same activity under a specialized program. Nevertheless, such a conclusion would be supported to some extent by Fisher's observation that nearly one-third of a sanitarian's time is spent in travel (2). In a generalized program, the amount of travel is considerably reduced because (a) each sanitarian can cover a smaller geographic area and (b) overlapping of the same travel route by two or more sanitarians rarely occurs. To reach any valid conclusions concerning the economy of a generalized program, we would have to know more about the program coverage and the effectiveness of the activities in comparison with these facets of a specialized program.

Program Costs

Comparison of budget figures for environmental health programs in various health departments needs to be approached with caution, particularly when the departments vary widely

Table 2. Types of services provided by local health departments in specified environmental sanitation activities, 1954

Activity	Routine inspection service		Consultation service		Routine inspection and consultation service	
	Number	Percent ¹	Number	Percent ¹	Number	Percent ¹
Water.....	30	85.8	26	74.4	22	62.9
Plumbing.....	8	22.9	10	28.6	2	5.7
Sewage.....	30	85.8	24	68.6	20	57.1
Bathing places.....	32	91.5	18	51.4	15	42.9
Refuse disposal.....	19	54.2	18	51.4	11	31.4
Food.....	34	97.0	14	40.0	13	37.1
Meat.....	25	71.4	12	34.3	8	22.9
Milk.....	31	88.5	14	40.0	13	37.2
Pest and vector control.....	19	54.2	24	68.6	12	34.3
Animal diseases.....	3	8.6	7	20.0	3	8.6
Housing.....	16	45.7	10	28.6	7	20.0
Barber and beauty shops.....	9	25.7	7	20.0	4	11.4
Institutions.....	21	60.0	17	48.6	9	25.7
Schools.....	23	65.8	17	48.6	11	31.4
Air pollution.....	10	28.6	15	42.9	7	20.0
Industrial health.....	10	28.6	18	51.4	5	14.3

¹ All 35 health departments=100 percent.

in terms of population served and scope of program, as do those included in this study. Nevertheless, such data give some idea as to the amount people are willing to pay for environmental health services.

Budget data for the 35 local health departments, which served populations ranging from 18,000 to 2,000,000, are given in table 5. The average per capita sanitation program budget was 44 cents, with a range of 11 cents to 96 cents. Although the variation was rather wide, there were health departments in each population group with budgets near each end of this range. Environmental health divisions which were on the lower end of the per-capita-budget scale were also receiving a smaller portion of the health department budget. For example, environmental health divisions that reported a budget of less than 25 cents per capita received a median 18 percent of the health department budget, whereas those with a budget of 75 cents or more per capita received a median 40 percent of the health department budget.

The average per capita cost per sanitation activity was 4.8 cents. (As used here, and elsewhere in this report, "activity" refers to such program classifications as those listed in tables 1 and 2.)

For comparison with the 1954 data, the budget

data reported by 32 health departments in 1951 are also given in table 5. The average per capita health department budget was somewhat greater in 1954 than in 1951 for the larger departments. However, with the exception of one population group, there was little difference between the 1951 and the 1954 average per

Table 3. Degree of specialization in environmental sanitation activities, 1954

Activity	Local health departments reporting		
	Total number	Number specialized	Percent specialized
Water.....	30	4	13
Plumbing.....	8	5	63
Sewage.....	30	4	13
Bathing places.....	32	4	13
Refuse disposal.....	19	0	0
Food.....	34	13	38
Meat.....	25	12	48
Milk.....	31	27	90
Pest and vector control.....	19	11	58
Animal diseases.....	3	3	100
Housing.....	16	6	38
Barber and beauty shops.....	9	1	11
Institutions.....	21	1	5
Schools.....	23	2	9
Air pollution.....	10	0	0
Industrial health.....	10	6	60

capita sanitation program budgets. This exception was the 200,000-499,999 population group, for which the average per capita sanitation budget increased significantly between 1951 and 1954. As pointed out earlier, 6 of the 10 departments in this group reporting in 1954 also reported in 1951, and 3 of the remaining 4 reported considerably lower than average per capita sanitation budgets. Hence, most of the departments in the 200,000-499,999 group apparently received a significant increase in their sanitation program budgets during the 1951-54 period. That observation is substantiated by the fact that this group of departments was

the only one that reported a reduction in population per professional sanitation worker—from 15,300 to 14,500—between 1951 and 1954. For all departments, the population per professional sanitation worker increased from 13,300 in 1951 to 16,900 in 1954.

The 1954 average per capita sanitation program budget of 44 cents is four times the average amount (11 cents) spent by State health departments for environmental health services in 1950 (3). Environmental health divisions in local health departments absorbed, on the average, 25 percent of the total health department budget, whereas in State health departments

Table 4. Average per capita budget, average population served per professional worker, average number of activities, and average per capita cost per activity for 35 local health departments grouped according to degree of specialization, 1954

Percent of activities specialized	Number of health departments	Average per capita budget	Average population per professional worker ¹	Average number of activities	Average per capita cost per activity
0-24.9.....	14	\$0.307	22,000	8.4	\$0.037
25-49.9.....	13	.488	14,300	10.0	.048
50-74.9.....	4	.639	12,250	9.8	.065
75-100.0.....	4	.576	12,300	8.3	.070

¹ All sanitation personnel, except clerical and labor.

Table 5. Budget data for local health departments, by population served, 1951 and 1954

Population served	Year	Number of departments reporting	Per capita budget								
			Average			Maximum			Minimum		
			Total	Sanitation	Percent sanitation of total	Total	Sanitation	Percent sanitation of total	Total	Sanitation	Percent sanitation of total
Less than 100,000.....	1951.....	3	\$1.75	\$0.37	21.2	\$2.75	\$0.65	23.6	\$0.60	\$0.16	26.7
	1954.....	3	1.40	.34	24.3	1.95	.51	33.9	.75	.18	17.2
100,000-199,999.....	1951.....	11	1.47	.39	26.5	2.85	1.02	35.8	.66	.17	25.7
	1954.....	8	1.70	.39	22.9	2.59	.56	41.2	1.11	.19	14.5
200,000-499,999.....	1951.....	10	1.17	.33	28.3	2.01	.45	22.3	.68	.15	22.1
	1954.....	10	1.62	.53	32.7	2.56	.96	87.7	.84	.19	13.0
500,000 or more.....	1951.....	8	1.86	.45	24.2	3.00	.69	23.0	1.20	.29	24.1
	1954.....	14	1.73	.43	24.8	2.70	.88	40.0	.60	.11	10.8
All departments.....	1951.....	32	1.50	.38	25.4	3.00	1.02	35.8	.60	.15	22.1
	1954.....	35	1.66	.44	26.5	2.70	.96	87.7	.60	.11	10.8

only 7 percent of the total health department budget was spent for environmental sanitation in 1950 (4). Although State expenditures for all health services increased by 245 percent during the period 1940 to 1950, expenditures for environmental health increased only 31 percent.

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Constitutionality of Temporary Committal Of the Mentally Ill by Medical Certification

The Supreme Judicial Court of Maine in the case of *In re Opinion of the Justices*, 117 A. 2d 63 (May 18, 1955), has held that a statute may constitutionally provide for the temporary confinement (35 days) of a mentally ill person who is certified by a physician as being "likely to injure himself or others if not immediately restrained" provided that the statute also provides adequate methods by which persons so hospitalized may "institute (judicial) proceedings to test the necessity of their commitment."

This question was presented to the court by a request for a declaratory judgment on the constitutionality of a proposed bill governing the commitment of the mentally ill. In a prior decision, *Appeal of Sleeper*, 87 A. 2d 115, this court held that where, as here, the temporary confinement is not ancillary to the institution of judicial proceedings the law requires that the person hospitalized be given an opportunity to institute judicial proceedings to test the necessity of his confinement and that this need is not satisfied by the availability of the writ of habeas corpus.

In the present case, the proposed bill adopted the language of section 17 of the Draft Act

Governing Hospitalization of the Mentally Ill (Public Health Service Publication No. 51). It provides that a patient who applies for his release shall be released within 48 hours unless the superintendent of the hospital certifies to a court of proper jurisdiction that in his opinion such release would be unsafe to the patient or others. In this case the patient may be detained for the length of time, not exceeding 5 days, necessary to institute judicial commitment proceedings.

Assuming, as this court apparently did, that the "temporary" 35-day commitment involved in this case must meet the same due process requirements as an indefinite hospitalization by medical certification, the court appears to have taken a different view than that adopted by the Supreme Court of Missouri in *Missouri ex rel. Fuller v. Mullinax*, 269 S. W. 2d 72 (*Public Health Reports*, October 1954, p. 982). That decision declared that such indefinite hospitalization without an opportunity for prior judicial proceedings was unconstitutional despite the presence of the remedies provided for by section 17 of the Draft Act.